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#### UNITED STATES PATENT AND TRADEMARK OFFICE

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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

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Ex parte Reinhold Holtkamp Sr.

Appeal 2007-4136 Application 10/046,968 Technology Center 1660

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Decided: April 23,2008

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Before DONALD E. ADAMS, RICHARD M. LEBOVITZ, and FRANCISCO C. PRATS, *Administrative Patent Judges*.

ADAMS, Administrative Patent Judge.

#### **DECISION ON APPEAL**

This appeal under 35 U.S.C. § 134 involves claims 1-3 and 5-8. Claim 4, the only remaining claim pending in this application, "is pending and objected to, but would be allowable if written in independent form" (App. Br. 3). Accordingly, claim 4 is not before us on appeal (*see e.g.*, App. Br. 24). We have jurisdiction under 35 U.S.C. § 6(b).

## **INTRODUCTION**

The claims are directed to an African Violet plant (claims 1-3), a method of producing an African Violet plant (claims 5 and 6), African Violet seeds produced by the method of claim 5 (claim 7), and a method of increasing the number of flower stems per leaf axil in an African Violet plant (claim 8). Claims 1 and 5 are illustrative:

- 1. An African Violet plant comprising at least one leaf axil that produces more than one flower stem.
- 5. A method of producing an African Violet plant having at least one leaf axil with more than one flower stem and a second desirable trait, the method comprising the steps of crossing, as the male or female parent, a first African Violet plant that has at least one leaf axil with more than one flower stem, with a second African Violet plant having a second desirable trait but only 1 flower stem, with a second African Violet plant having a second desirable trait but only 1 flower stem on any leaf axil, and selecting progeny that have at least one leaf axil with more than one flower stem and the second desirable trait.

The Examiner relies on the following prior art references to show unpatentability:

Holtkamp, Sr.	US PP13,786 P2	May 6, 2003
Holtkamp, Sr.	US PP13,789 P2	May 6, 2003
Holtkamp, Sr.	US PP13,818 P2	May 13, 2003
Holtkamp, Sr.	US PP13,842 P2	May 20, 2003

Biology of Plants 134-35 (Fifth ed., Peter H. Raven, et al. eds., Worth Publishers, New York, NY 1992)

Hartl, Genetics 474-475 (Third ed., Jones and Bartlett Publishers, Boston, MA 1994)

Van Harten, Mutation Breeding Theory and Practical Applications 111-137 (Cambridge University Press, New York, NY 1998)

The rejection as presented by the Examiner are as follows:

- 1. Claims 1-3 and 5-8 stand rejected under the enablement provision of 35 U.S.C. § 112, first paragraph.
- 2. Claims 1-3 and 7 stand rejected under the written description provision of 35 U.S.C. § 112, first paragraph.

We reverse.

## **DISCUSSION**

"African Violet plants produce a flower stem that grows from the leaf node or leaf axil" (Spec. 3). "The leaf node or leaf axil refer to the place where a leaf joins the main axis of the plant" (*id.*). "[T]raditional breeding techniques have failed to produce African Violet cultivars that stably produce more than one flower stem from one leaf node or leaf axil" (*id.*).

Appellant discloses that a mutant plant "SB 4-2 Muflo" was obtained which exhibits the multiflorescence trait (Spec. 8). "Multiflorescence means that a leaf node may have at least 2 flower stems" (Spec. 2). Appellant discloses that

'SB 4-2 Muflo' was crossed to diverse African Violet plants to introgress the multiflorescence trait into diverse genetic backgrounds. Seeds from the cross of 'SB 4-2 Muflo' with 'P 6/6' have been deposited with the American Type Culture Collection (10801 University Blvd. Manassas, VA 20110-2209) and accorded ATCC Accession No. . . . [PTA-3982].

(Spec. 8; App. Br. Exhibit A.) "Plants from the seeds produced, from the cross of 'SB 4-2 Muflo' with 'P 6/6' and deposited with the ATCC can be crossed with any African Violet plant to produce progeny that exhibit the multiflorescence trait" (Spec. 8). Claim 5 is drawn to such a method of crossing - a method of producing an African Violet plant having at least one leaf axil with more than one flower stem and a second desirable trait, the method comprising the steps of crossing, as the male or female parent, a first African Violet plant that has at least one leaf axil with more than one flower stem, with a second African Violet plant having a second desirable trait but only 1 flower stem, with a second African Violet plant having a second desirable trait but only 1 flower stem on any leaf axil, and selecting progeny that have at least one leaf axil with more than one flower stem and the second desirable trait (Claim 5). Claim 1 is drawn to a plant that may result from such a cross - an African Violet plant comprising at least one leaf axil that produces more than one flower stem (Claim 1).

## Enablement:

The Examiner acknowledges that

it would take a very low quantity of experimentation to create a multi-florescent African violet plant by crossing 'SB 4-2 Muflo' or one of its progeny [(e.g., 'SB 4-2 Muflo' with 'P 6/6')] with an African violet plant that has other desirable traits, as the multi-florescent trait discovered appears to be dominant and stably transmissible.

(August 7, 2007 Office Action 3<sup>1</sup>.)

<sup>&</sup>lt;sup>1</sup> This document is not paginated, accordingly we refer to page numbers as if the document was paginated consecutively beginning with the first page.

Nevertheless, the Examiner asserts that while Appellant's Specification provides an enabling disclosure "for multiflorescent African Violet plants derived from the deposited material and methods using the same, [it] does not reasonably provide enablement for multi-florescent [sic] African violets made by any other method" (August 7, 2007 Office Action 2). According to the Examiner,

[i]t would take a very high quantity of experimentation to produce an African violet plant comprising at least one leaf axil that has the multi-florescent [sic] trait – applicant exposed 25,000 seeds to radiation and zero gravity for a period of six years with the help of the space program to transform one (1) plant with the multi-florescent [sic] trait.

## (August 7, 2007 Office Action 3.)

However, as Appellant correctly points out,

the law makes clear that the specification need teach only one mode of making and using a claimed invention. *Engel Indus. Inc. v. Lockformer Co.*, 946 F.2d 1528, 1533 . . . (Fed. Cir. 1991). See also *Johns Hopkins Univ. v. Cellpro Inc.* 152 F.3d 1342, 1361 . . . (Fed. Cir. 1998) (holding that the enablement requirement is met if the description enables any mode of making and using the invention.); *Amgen, Inc. v. Hoechst Marion Roussel, Inc.*, 126 F. Supp. 2d 69 . . . (D. Mass. 2001) (holding that there is no requirement that the specification enable every mode for making and using the claimed products).

# (Reply Br. 5.)

On this record, the starting material (seeds from 'SB 4-2 Muflo' crossed with 'P 6/6') has been deposited and the Examiner admits that performing a cross with this starting material and another African Violet plant is routine in this art (August 7, 2007 Office Action 3). Accordingly,

we reverse the rejection of claims 1-3 and 5-8 under the enablement provision of 35 U.S.C. § 112, first paragraph.

## Written Description:

## According to the Examiner

[t]he claims encompass all African violet plants with a particular inflorescence architecture, regardless of its origin, all African violet plants produced by cross breeding with plants exhibiting a particular inflorescence architecture, and all seeds or plants grown from some deposited seeds. Plants have many phenotypical traits, which vary independently, so millions of possible phenotypes are possible and claimed. The specification discloses only a few specific multi-florescent [sic] African Violet plants but not the heterozygous population claimed.

(August 7, 2007 Office Action 3.) The Examiner asserts that "[t]he limited disclosure in the specification is not deemed sufficient to reasonably convey to one skilled in the art that Applicants [sic] were in possession of the huge genera recited in the claims at the time the application was filed" (*id.*). According to the Examiner, Appellant "should not be permitted to claim all multi-florescent [sic] African Violets produced by any method, as it is impossible to predict whether or not multi-florescent [sic] African Violets could be developed by an alternate, non-obvious method during the patent term of the instant claims" (*id.*).

"The 'written description' requirement serves a teaching function, . . . in which the public is given 'meaningful disclosure in exchange for being excluded from practicing the invention for a limited period of time."

University of Rochester v. G.D. Searle & Co., Inc., 358 F.3d 916, 922 (Fed. Cir. 2004) (citation omitted). Another "purpose of the 'written description'

requirement is . . . [to] convey with reasonable clarity to those skilled in the art that, as of the filing date [], [the applicant] was in possession of the invention." *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64 (Fed. Cir. 1991). *See also Enzo Biochem Inc. v. Gen-Probe Inc.*, 296 F.3d 1316, 1329 (Fed. Cir. 2002). The requirement is satisfied when the Specification "set[s] forth enough detail to allow a person of ordinary skill in the art to understand what is claimed and to recognize that the inventor invented what is claimed." *Rochester*, 358 F.3d at 928. Whether or not a Specification satisfies the requirement is a question of fact, which must be resolved on a case-by-case basis. *Vas-Cath*, 935 F.2d at 1562-63. Further, it is the Examiner's "initial burden [to] present[] evidence or reasons why persons skilled in the art would not recognize in the disclosure a description of the invention defined by the claims." *In re Wertheim*, 541 F.2d 257, 263 (CCPA 1976).

The claims require an African Violet plant comprising at least one leaf axil that produces more than one flower stem (Claim 1), at least 3 flower stems (Claim 2), at least 4 flower stems (Claim 3), and African Violet seeds produced by the method of claim 5, wherein the seeds produce a plant comprising at least one leaf axil that has more than one flower stem (Claim 7). Thus the only phenotypic requirement of the claimed African Violet plants and seeds is that they have, or produce a plant that has, more than one flower stem – e.g. they exhibit the multiflorescence trait.

Appellant's Specification discloses that "[p]lants from the seeds produced, from the cross of 'SB 4-2 Muflo' with 'P 6/6' and deposited with the ATCC can be crossed with any African Violet plant to produce progeny that exhibit the multiflorescence trait" (Spec. 8). The Examiner asserts,

however, that "[t]he problem with the appealed claims is that Appellant has shown possession of only 'SB 4-2 Muflo' and its progeny, rather than all multiflorescent African Violets having this particular characteristic" (Ans. 13). We are not persuaded. The Examiner offers no persuasive evidence on this record to support the assertion that Appellant was not in possession of the genus of plants and seeds as claimed.

Further, we find the Examiner's position on this record inconsistent. On one hand, the Examiner asserts that the evidence in the Specification runs contrary to Appellant's assertion that the multiflorescence trait is dominant (Ans. 11); on the other the Examiner asserts that "the multiflorescent trait discovered appears to be dominant and stably transmissible" (August 7, 2007 Office Action 3). Notwithstanding the Examiner's inconsistent position, the Examiner concludes that one would not be able to "predict the percentage of multiflorescent African Violets arising from crosses with 'SB 4-2 Muflo' and its progeny" (Ans. 12). However, as Appellant explains "there is no statutory requirement than an invention operate at a specified efficiency or predictable percentage" (Reply Br. 12). We agree. Accordingly, we are not persuaded by the Examiner's argument.

Lastly, the Examiner asserts that "no written description is present in the specification for claims 2 and 3, which are directed to plants where the leaf axil displays 'at least 3' or 'at least 4' flower stems" (Ans. 11). We note, however, that Appellant's Specification discloses that

[t]he instant invention provides African Violet plant selections that have 2, 3, 4, 5 or more flower stems at a leaf axil. African Violet plants that have 2, 3, 4, 5 or more flower stems at each leaf axil carry the multiflorescence trait. Also provided is a method of producing new African Violet selections that produce 2, 3, 4, 5 or more flower[] stems at a

leaf axil by crossing a first plant selection carrying the multiflorescence trait with a second plant selection that does not carry the multiflorescence trait but exhibits a second trait of interest, and selecting progeny that exhibits multiflorescence and the second trait of interest.

(Spec. 3-4.) Further, contrary to the Examiner's assertion, Appellant's Figure 1 "shows [an African violet plant with] three flower stems, all coming out of one single leaf axil, each one in a different stage of development" (Spec. 5; Fig. 1).

For the foregoing reasons we find that the Examiner failed to meet her initial burden of presenting the evidence or argument necessary to sustain the rejection. Accordingly, we reverse the rejection of claims 1-3 and 7 under the written description provision of 35 U.S.C. § 112, first paragraph.

## CONCLUSION

In summary, we reverse the rejections of record.

## **REVERSED**

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